Project		**Catalog #**		**Type**	
Prepared by		**Notes**		**Date**	


Prevail XL

Prevail





Lumark

Prevail / Prevail XL Discrete LED

Area / Site Luminaire

Product Features

LumenSafe Technology

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Configurations page 3
- Product Specifications page 4
- Energy and Performance Data page 4
- Control Options page 5

Product Certifications

Quick Facts

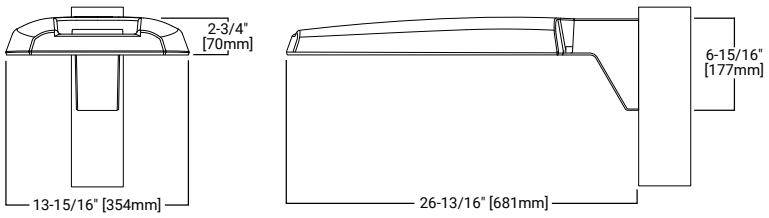
- Direct-mounted discrete light engine for improved optical uniformity and visual comfort
- Lumen packages range from 7,500 - 41,000 nominal lumens (50W - 300W)
- Replaces 70W up to 1,000W HID equivalents
- Efficacies up to 148 lumens per watt
- Standard universal quick mount arm with universal drill pattern

Connected Systems

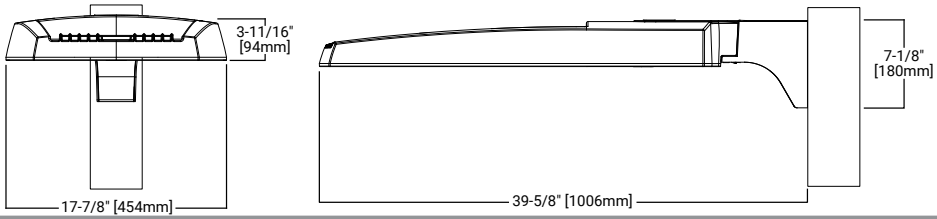
- WaveLinx
- Enlighted

Dimensional Details

Prevail



Prevail XL



Ordering Information

SAMPLE NUMBER: **PRV-XL-PA4B-740-U-T4W-BZ**

Product Family [1, 2]	Light Engine		Color Temperature	Voltage	Distribution	Mounting (Included)	Finish
	Configuration	Drive Current [3]					
PRV=Prevail	**PA1**=1 Panel, 24 LED Rectangle **PA2**=2 Panels, 48 LED Rectangles	**A**=745mA Nominal **B**=950mA Nominal	**740**=70CRI, 4000K **730**=70CRI, 3000K **735**=70CRI, 3500K **750**=70CRI, 5000K	**U**=Universal, 120-277V **H**=High Voltage, 347-480V **9**=347V **8**=480V [4]	**T2R**=Type II Roadway **T2U**=Type II Urban **T3**=Type III **T4W**=Type IV Wide **5WQ**=Type V Square Wide	**[Blank]**=Standard Versatile Arm **MA**=Mast Arm **WM**=Wall Mount Arm	**AP**=Grey **BK**=Black **BZ**=Bronze **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White
PRV-XL=Prevail XL	**PA3**=3 Panels, 72 LED Rectangles **PA4**=4 Panels, 96 LED Rectangles						

Options (Add as Suffix)

10K=10kV UL 1449 Fused Surge Protective Device
20MSP=20kV MOV Surge Protective Device
20K=Series 20kV UL 1449 Surge Protective Device
HA=50°C High Ambient Temperature
HSS=House Side Shield (Factory Installed) [5]
L90=Optics Rotated 90° Left
R90=Optics Rotated 90° Right
PR=NEMA 3-PIN Twistlock Photocontrol Receptacle [6]
PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle [6]
SPB1=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting [23]
SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting [23]
SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting [23]
MS/DIM-L08=Motion Sensor for Dimming Operation, Up to 8' Mounting Height [7, 8, 9]
MS/DIM-L20=Motion Sensor for Dimming Operation, 9' - 20' Mounting Height [7, 8, 9]
MS/DIM-L40=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height [7, 8, 9]
MS-L08=Motion Sensor for ON/OFF Operation, Up to 8' Mounting Height [7, 8, 9]
MS-L20=Motion Sensor for ON/OFF Operation, 9' - 20' Mounting Height [7, 8, 9]
MS-L40=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height [7, 8, 9]
ZD=DALI-enabled 4-PIN Twistlock Receptacle [7, 8, 10, 11]
ZW=Wavelinx-enabled 4-PIN Twistlock Receptacle [7, 8, 10, 11]
SWPD4XX=Wavelinx Wireless Sensor, 7' - 15' Mounting Height [7, 8, 10, 11, 12, 13]
SWPD5XX=Wavelinx Wireless Sensor, 15' - 40' Mounting Height [7, 8, 10, 11, 12, 13]
LWR-LW=Enlighted Wireless Sensor, Wide Lens for 8' - 16' Mounting Height [7, 8, 14]
LWR-LN=Enlighted Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height [7, 8, 14]
(See Table Below)=LumenSafe Integrated Network Security Camera [15, 16]
CC=Coastal Construction [22]

Accessories (Order Separately) [17]

PRVWM-XX=Wall Mount Kit [18]
PRVMA-XX=Mast Arm Mounting Kit [18]
PRVSA-XX=Standard Arm Mounting Kit [18]
PRVXLWM-XX=Wall Mount Kit (for Prevail XL) [15]
PRVXLMA-XX=Mast Arm Mounting Kit (for Prevail XL) [15]
PRVXLSA-XX=Standard Arm Mounting Kit (for Prevail XL) [15]
MA1010-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon
MA1011-XX=2@180° Tenon Adapter for 3-1/2" O.D. Tenon
MA1017-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon
MA1018-XX=2@180° Tenon Adapter for 2-3/8" O.D. Tenon
HSS-VP=House Side Shield, Vertical Panel [5, 19]
HSS-HP=House Side Shield, Horizontal Panel [5, 19]
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=NEMA Photocontrol - 120V
OA/RA1016=NEMA Photocontrol - Multi-Tap 105-285V
OA/RA1201=NEMA Photocontrol - 347V
OA/RA1027=NEMA Photocontrol - 480V
FSIR-100=Wireless Configuration Tool for Motion Sensor [20]
SWPD4-XX=WaveLinx Wireless Sensor, 7' - 15' Mounting Height [11, 12, 13]
SWPD5-XX=WaveLinx Wireless Sensor, 15' - 40' Mounting Height [11, 12, 13]
WOLC-7P-10A=WaveLinx Outdoor Control Module (7-PIN) [21]

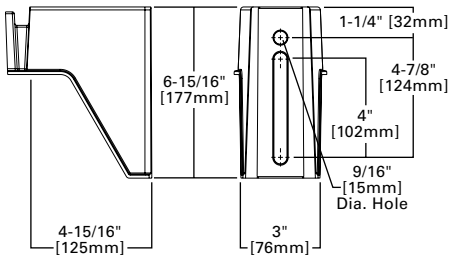
NOTES:
1. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
2. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for applications. Refer to installation instructions and pole white paper WP513001EN for additional support information.
3. Nominal drive currents shown here. For actual drive current by configuration, refer to Power and Lumen tables.
4. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
5. House Side Shield not for use with 5WQ distribution.
6. If High Voltage (H) is specified, use a photocontrol that matches the input voltage used (either 347V or 480V).
7. Option not available with High Voltage (H). Must specify Universal (U), 347V (9), or 480V (8) voltage.
8. Controls system is not available with photocontrol receptacle (PR or PR7) or other controls systems (MS, ZW, ZD or LWR).
9. Utilizes the Wattstopper sensor FSP-211.
10. Sensor passive infrared (PIR) may be overly sensitive when operating below -20°C (-4°F).
11. For the device to be field-configurable, requires WAC Gateway components WAC-PoE and WPOE-120 in appropriate quantities. Only compatible with WaveLinx system and software and requires system components to be installed for operation. See website for more Wavelinx application information.
12. Replace XX with sensor color (WH, BZ or BK).
13. Requires 4-PIN twistlock receptacle (ZD or ZW) option.
14. Enlighted wireless sensors are factory installed and require network components LWP-EM-1, LWP-GW-1, and LWP-PoE8 in appropriate quantities. See website for application information.
15. Only available in PRV-XL configurations PA3X or PA4X.
16. Not available with High Voltage (H, 8 or 9) or HA options. Consult LumenSafe system product pages for additional details and compatibility information.
17. Replace XX with paint color.
18. Only available in PRV configurations PA1X or PA2X.
19. Must order one per optic/LED when ordering as a field-installable accessory (1, 2, 3 or 4). Refer to House Side Shield reference table for details.
20. This tool enables adjustment to Motion Sensor (MS) parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative for more information.
21. Requires 7-PIN NEMA twistlock photocontrol receptacle (PR7) option. The WOLC-7 cannot be used in conjunction with other controls systems (MS, ZW, ZD or LWR). Only for use at 120-347V.
22. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654.
23. Smart device with mobile application required to change system defaults. See controls section for details.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

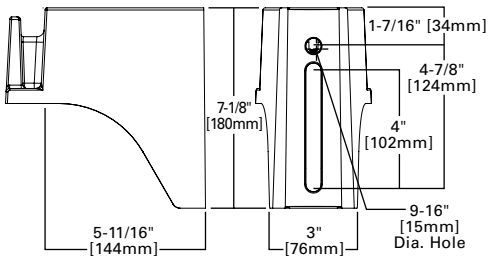
Product Family	Camera Type	Data Backhaul	
L=LumenSafe Technology	**D**=Dome Camera	**C**=Cellular, Customer Installed SIM Card **A**=Cellular, Factory Installed AT&T SIM Card **V**=Cellular, Factory Installed Verizon SIM Card **S**=Cellular, Factory Installed Sprint SIM Card	**E**=Ethernet Networking

Mounting Details

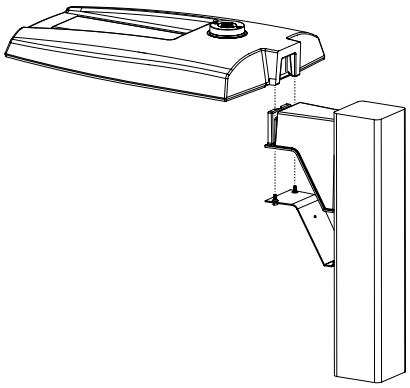
Pole Mount Arm (PRV)



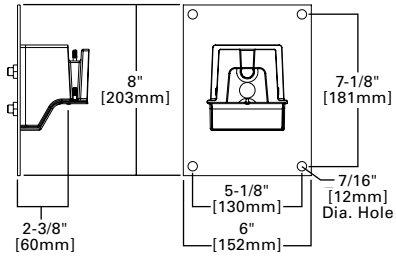
Pole Mount Arm (PRV-XL)



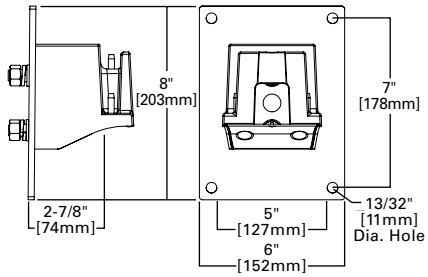
Versatile Mount System



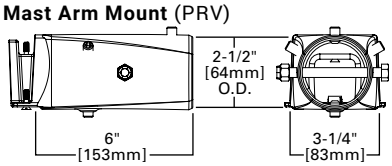
Wall Mount (PRV)



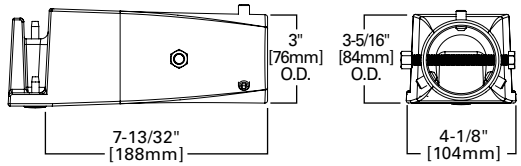
Wall Mount (PRV-XL)



Mast Arm Mount (PRV)



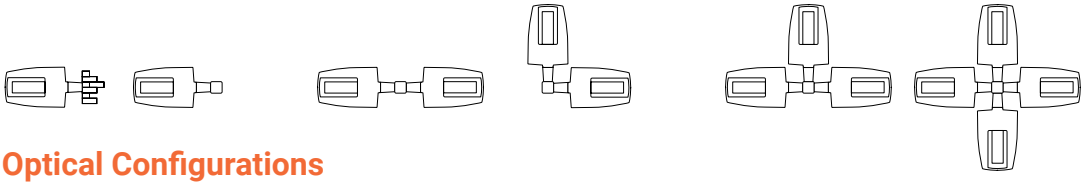
Mast Arm Mount (PRV-XL)



Mounting Configurations and EPAs

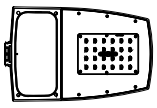
NOTE: For 2 PRV's mounted at 90°, requires minimum 3" square or 4" round pole for fixture clearance. For 2 PRV-XL's mounted at 90°, requires minimum 4" square or round pole for fixture clearance. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for applications.

Wall Mount	Arm Mount Single	Arm Mount 2 @ 180°	Arm Mount 2 @ 90°	Arm Mount 3 @ 90°	Arm Mount 4 @ 90°
	EPA 0.92 (PRV) EPA 1.12 (PRV-XL)	EPA 1.35 (PRV) EPA 2.25 (PRV-XL)	EPA 1.42 (PRV) EPA 2.13 (PRV-XL)	EPA 1.63 (PRV) EPA 2.52 (PRV-XL)	EPA 1.63 (PRV) EPA 2.52 (PRV-XL)

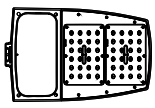


Optical Configurations

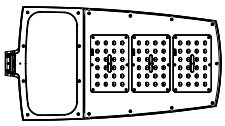
PRV-PA1X



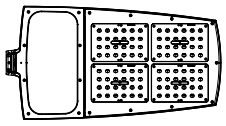
PRV-PA2X



PRV-XL-PA3X

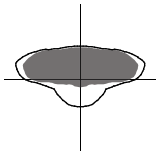


PRV-XL-PA4X

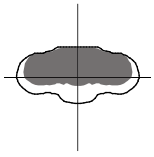


Optical Distributions

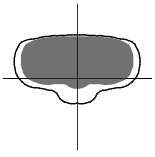
T2R
(Type II Roadway)



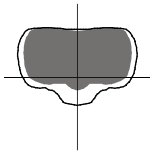
T2U
(Type II Urban)



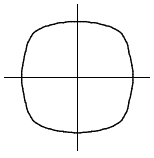
T3
(Type III)



T4W
(Type IV Wide)



5WQ
(Type V Square Wide)



= Distribution with House Side Shield (HSS)

= Optical Distribution

Product Specifications

Construction
- Single-piece die-cast aluminum housing
- Tethered die-cast aluminum door

Optics
- Dark Sky Approved (3000K CCT and warmer only)
- Precision molded polycarbonate optics

Electrical
- -40°C minimum operating temperature
- 40°C maximum operating temperature
- >.9 power factor
- <20% total harmonic distortion
- Class 1 electronic drivers have expected life of 100,000 hours with <1% failure rate
- 0-10V dimming driver is standard with leads external to the fixture

Mounting
- Versatile, patented, standard mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8" (Type M drilling recommended for new installations)
- A knock-out on the standard mounting arm enables round pole mounting
- Prevail: 3G vibration rated (all arms)
- Prevail XL Mast Arm: 3G vibration rated
- Prevail XL Standard Arm: 1.5G vibration rated

Finish
- Five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness

Shipping Data
- Prevail: 20 lbs. (9.09 kgs.)
- Prevail XL: 45 lbs. (20.41 kgs.)

Warranty
- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

Energy and Performance Data

Power and Lumens (PRV)

Light Engine		PA1A	PA1B	PA2A	PA2B
Power (Watts)		54	74	113	151
Drive Current (mA)		670	930	720	970
Input Current @ 120V (A)		0.45	0.62	0.93	1.26
Input Current @ 277V (A)		0.21	0.28	0.41	0.55
Input Current @ 347V (A)		0.17	0.23	0.33	0.45
Input Current @ 480V (A)		0.12	0.17	0.24	0.33
Distribution					
Type II Roadway	4000K/5000K Lumens	7,605	9,896	15,811	19,745
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3
	Lumens per Watt	141	134	141	131
	3000K Lumens [1]	6,926	9,012	14,399	17,982
Type II Urban	4000K/5000K Lumens	7,597	9,886	15,795	19,724
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	Lumens per Watt	141	134	141	131
	3000K Lumens [1]	6,919	9,003	14,384	17,963
Type III	4000K/5000K Lumens	7,575	9,857	15,749	19,667
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G3
	Lumens per Watt	140	133	141	130
	3000K Lumens [1]	6,899	8,977	14,343	17,911
Type IV Wide	4000K/5000K Lumens	7,484	9,738	15,560	19,431
	BUG Rating	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4
	Lumens per Watt	139	132	139	129
	3000K Lumens [1]	6,816	8,869	14,170	17,696
Type V Square Wide	4000K/5000K Lumens	7,831	10,190	16,281	20,332
	BUG Rating	B3-U0-G2	B4-U0-G3	B4-U0-G3	B5-U0-G3
	Lumens per Watt	145	138	145	135
	3000K Lumens [1]	7,132	9,280	14,827	18,517

NOTES:
1. For 3000K BUG Ratings, refer to published IES files.

View PRV Discrete IES files

Power and Lumens (PRV-XL)

Light Engine		PA3A	PA3B	PA4A	PA4B
Power (Watts)		172	234	245	303
Drive Current (mA)		750	980	785	970
Input Current @ 120V (A)		1.44	1.95	2.04	2.53
Input Current @ 277V (A)		0.62	0.85	0.93	1.12
Input Current @ 347V (A)		0.52	0.70	0.74	0.90
Input Current @ 480V (A)		0.39	0.52	0.53	0.65
Distribution					
Type II Roadway	4000K/5000K Lumens	24,718	30,648	34,067	39,689
	BUG Rating	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
	Lumens per Watt	144	131	139	131
	3000K Lumens [1]	22,511	27,912	31,025	36,145
Type II Urban	4000K/5000K Lumens	24,692	30,616	34,031	39,647
	BUG Rating	B4-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	144	131	139	131
	3000K Lumens [1]	22,488	27,882	30,992	36,107
Type III	4000K/5000K Lumens	24,621	30,527	33,932	39,532
	BUG Rating	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	143	130	138	130
	3000K Lumens [1]	22,423	27,802	30,903	36,002
Type IV Wide	4000K/5000K Lumens	24,325	30,161	33,525	39,057
	BUG Rating	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	141	129	137	129
	3000K Lumens [1]	22,153	27,468	30,531	35,570
Type V Square Wide	4000K/5000K Lumens	25,453	31,559	35,079	40,868
	BUG Rating	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	148	135	143	135
	3000K Lumens [1]	23,180	28,741	31,947	37,219

NOTES:
1. For 3000K BUG Ratings, refer to published IES files.

View PRV-XL Discrete IES files

Lumen Maintenance

Ambient Temperature	TM-21 Lumen Maintenance (78,000 Hours)
Up to 50°C	96.76%

House Side Shield Reference Table

		Light Engine Configuration			
		PA1	PA2	PA3	PA4
Rotated Optics	Standard	HSS-VP (qty 1)	HSS-HP (qty 2)	HSS-HP (qty 3)	HSS-VP (qty 4)
	L90 or R90 option	HSS-HP (qty 1)	HSS-VP (qty 2)	HSS-VP (qty 3)	HSS-HP (qty 4)

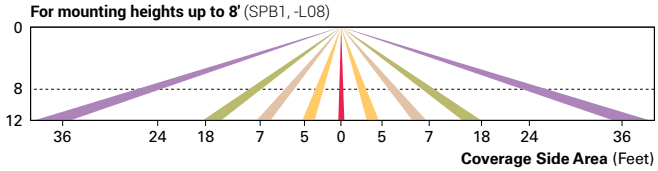
Control Options

0-10V This fixture provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

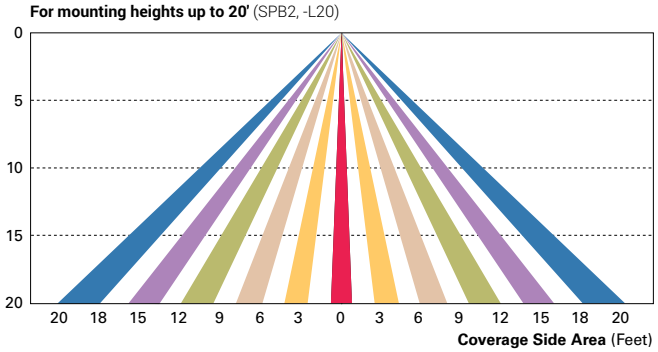
Photocontrol (PR and PR7) Photocontrol receptacles provide a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

Dimming Occupancy Sensor (SPB, MS/DIM-LXX and MS-LXX) These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the luminaire will dim down after five minutes of no activity detected. When activity is detected, the luminaire returns to full light output. When a sensor for ON/OFF operation (MS-LXX) is selected, the luminaire will turn off after five minutes of no activity. These occupancy sensors include an integral photocell that can be activated or inactivated with the programming remote / configuration tool for “dusk-to-dawn” control or “daylight harvesting.” SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10% power with a time delay of five minutes.

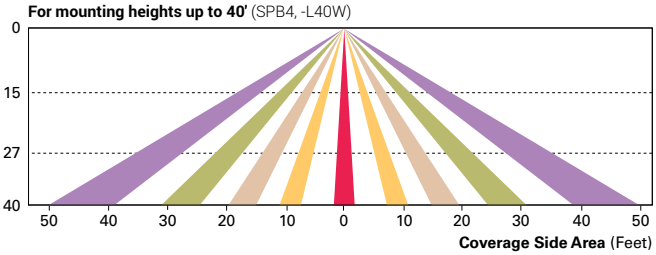
For mounting heights up to 8' (SPB1, -L08)



For mounting heights up to 20' (SPB2, -L20)



For mounting heights up to 40' (SPB4, -L40W)

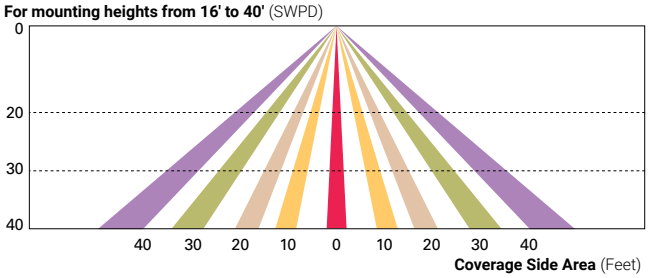


WaveLinx Wireless Control and Monitoring System Available in 7-PIN or 4-PIN configurations, the WaveLinx Outdoor control platform operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. Use the WaveLinx Mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets).

WaveLinx Outdoor Control Module (WOLC-7P-10A) A photocontrol that enables astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

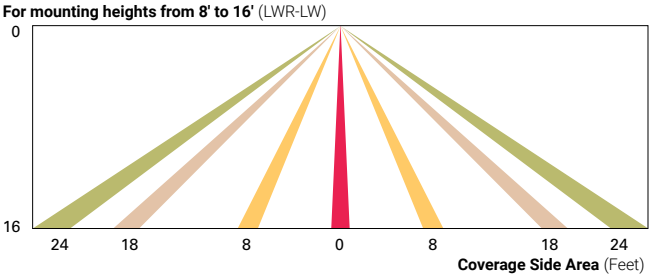
WaveLinx Wireless Sensor (SWPD4 and SWPD5) These outdoor sensors offer passive infrared (PIR) occupancy and a photocell for closed loop daylight sensing. These sensors can be factory installed or field-installed via simple, tool-less integration into luminaires equipped with the Zhaga Book 18 compliant 4-PIN receptacle (ZD or ZW). These sensors are factory preset to dim down to approximately 50 percent power after 15 minutes of no activity detected. These occupancy sensors include an integral photocell for "dusk-to-dawn" control or daylight harvesting that is factory-enabled. A variety of sensor lenses are available to optimize the coverage pattern for mounting heights from 7'-40'.

For mounting heights from 16' to 40' (SWPD)

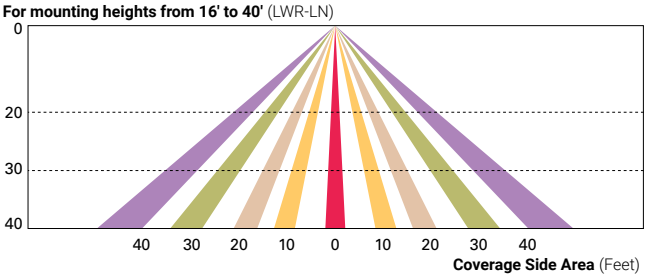


Enlighted Wireless Control and Monitoring System (LWR-LW and LWR-LN) The Enlighted System is a connected lighting solution that combines LED luminaires with an integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of other resources beyond lighting.

For mounting heights from 8' to 16' (LWR-LW)



For mounting heights from 16' to 40' (LWR-LN)



LumenSafe (LD) The LumenSafe integrated network camera is a streamlined, outdoor-ready camera that provides high definition video surveillance. This IP camera solution is optimally designed to integrate into virtually any video management system or security software platform of choice. No additional wiring is needed beyond providing line power to the luminaire. LumenSafe features factory-installed power and networking gear in a variety of networking options allowing security integrators to design the optimal solution for active surveillance.

Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.cooperlighting.com

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